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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,204	09/12/2003	Jason C. Lail	C0025A	7216
21495	7590	06/07/2005	EXAMINER	
CORNING CABLE SYSTEMS LLC			HYEON, HAE M	
P O BOX 489			ART UNIT	
HICKORY, NC 28603			PAPER NUMBER	
			2839	
DATE MAILED: 06/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

# Office Action Summary

Application No.

10/661,204

Applicant(s)

LAIL ET AL.

Examiner

Hae M. Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.  
4a) Of the above claim(s) 50, 51, 54, 55 and 58 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-41 is/are allowed.
- 6) ☒ Claim(s) 42-49, 52, 53, 56, 57, 59 and 60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 1 and 21 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 6, 15-17, 27, and 36-38, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Claims 6, 15-17, 27, and 36-38 hereby rejoined and fully examined for patentability under 37 CFR 1.104.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 42-49, 52, 53, 56, 57, 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurley (6,389,204 B1) in view of Fujiura et al (5,838,863).

Hurley discloses an optical tube assembly 20 comprising a tube 28, at least one optical waveguide 24 disposed in the tube 28, and at least one dry insert 26 disposed adjacent to the interior surface of the tube 28. In the Abstract, Hurley clearly teaches that the optical tube assembly includes attenuation of about 0.3 dB or less and a peak cable core pull-out force of about 1 Newton or less. However, Hurley does not disclose the dry layer having a polyurethane foam layers.

Fujiura discloses an optical cable having polyurethane foam layer 1 surrounding optical waveguide, which also includes water absorbent material to block moisture from entering into the cable. Also, water-swellaable tape and foam layer are commonly known in the art of an optical fiber cable.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the optical tube assembly taught by Hurley such that it would have a dry layer formed from polyurethane foam layers as taught by Fujiura to protect the optical waveguide by completely surrounding and sealing the inside of the tube.

Regarding to different materials for elements of the optical tube assembly, it only deals with the use of preferred material. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

#### ***Allowable Subject Matter***

4. Claims 1-41, 61 and 62 are allowed.
5. The following is an examiner's statement of reasons for allowance: For claims 1-20 and 61, in combination with all the limitations recited in the independent claim, all the prior arts do not show an optical tube assembly comprising a tube having an interior surface, at least one optical waveguide and at least one dry insert having a first layer being a polyurethane foam layer and a second layer being a water-swellaable layer that is disposed adjacent to the interior surface of the tube.

For claims 21-41 and 62, in combination with all the limitations recited in the independent claim, all the prior arts do not show an optical tube assembly comprising a tube having an interior surface, at least one optical waveguide, and at least one dry insert having at least two laminated layers coupled the at least one optical waveguide to the interior surface of the tube while cushioning the at least one optical waveguide.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### *Response to Arguments*

6. Applicant's arguments filed on April 26, 2005 have been fully considered but they are not persuasive.

The applicant argues that the instant invention comprises at least one dry insert having a first layer and a second layer, the first layer being a polyurethane foam and the second layer being a water-swellaable layer, wherein the dry insert is disposed within the tube adjacent to the interior surface of the tube and generally surrounds the at least one optical waveguide thereby coupling the at least one optical waveguide with the interior surface of the tube.

The examiner agrees with the applicant. However, claims 42-60 do not recite the optical tube assembly having two layers. Claims 42-60 only recite a single polyurethane foam layer. Therefore, the applicant's argument is not supported by the claim limitations recited in claims

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42-60. The applicant's argument only supports claims 1-41. Thus, the rejection applied in claims 42-60 in the previous office action filed on January 27, 2005 is appropriate.

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M. Hyeon whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hae M Hyeon  
Primary Examiner  
Art Unit 2839

hnh

*hnh*

*Hae Moon Hyeon*